#23

Mr. Timothy D. Collins USPTO Examiner US Dept. of Commerce

US Patent and Trademark Office

Commissioner of Patents And Trademarks

Washington D.C. 20231

Telephone: +1 703 306 9160 Fax: +1 703 306 4195 12 June 2002
P.F.Kaskiewicz
P.O. Box 822
Princeton Junction

NJ 08550 USA Telephone: +1 626 355 5370

Fax: +1 626 355 5370

E-mail: paulpfk@hotmail.com

Subject: Initial Response to Office Action Dated 9 January 2002

### References:

R1. Application Number: 09/673,559.

R2. Our priority document: USPN 6,102,339 to Turbosat Technology, Inc.

R3. Office Action from USPTO to Watov & Kipnes (our past attorneys), dated 9 January 2002.

# Amendments:

The following four pages enclosed herewith contain amendments:

- Exchange Page 31, to be exchanged for Page 31 as filed.

Exchange Page 59/to be exchanged for Page 59/as filed.

- Exchange Page 65, to be exchanged for Page 65 filed.

NOV 0 4 2002

**RECEIVED** 

New Page 60/0/1.

## **Cited Documents:**

**OFFICE OF PETITIONS** 

D1 EPO Publication No. EP 0 447 049, for European Patent Application 91301447.8 by GEC-Marconi Limited.

D2 EPO Publication No. EP 0 271 370, for European Patent Application 87402281.7 by Centre Nationale d'Etudes Spatiale.

D3 USPN 5,527,001 to Teledesic Corporation.

D4 EPO Publication No. EP 0 887 260, for European Patent Application 98401320.1 by Aerospatiale Societe Nationale Industrielle.

# **Translations:**

T1 Translation of European Patent Application 98401320.1 of Aerospatiale Societe Nationale Industrielle.

T2 Translation of European Patent Application 87402281.7 of Centre Nationale d'Etudes Spatiale.

## Appendices.

- 1. Brief explanation of various engineering terms related to radiation view factor.
- 2. Extracts from the disclosure of Reference R1 and the priority document, for tracing content of first independent claim of the disclosure of Reference R1.
- 3. Comparison of heat rejection capability of inventions according to Cited Document D4 and the disclosure of Reference R1 with various characteristics of the sun blocker component.
- 4. Brief explanation of MLI and 'effective emittance'.
- 5. Analysis of p 2, col 2, Il 32-36 in the description in Cited Document D4.
- Brief Discussion of Absorptivity, Emissivity and Reflectivity of Sun Blocker Surfaces.
- 7. Filled Out Information Disclosure Statement (IDS).

# **Table of Contents**

	<u>Page</u>
Introduction	3
Initial Response to Reference R3	3
1. Re Reference R3, paragraph 1 - "DETAILED ACTION"	3 3 3
2. Re Reference R3, paragraph 2 - "Claim Rejections – 35 USC § 112"	
3. Re Reference R3, paragraph 3 - "Claim Rejections – 35 USC § 112"	4
4. Re Reference R3, paragraph 4 - "Claim Rejections – 35 USC § 103"	4
5. Re Reference R3, paragraph 5 - "Claim Rejections – 35 USC § 103"	5
6. Re Reference R3, paragraph 6 - "Allowable Subject Matter"	9
7. Re Reference R3, paragraph 7 - "Conclusion"	9
7.1 OSRs and Other Reflective Coatings do Not Constitute Thermal-Insulation	
Means	10
7.2 Novelty and Inventive Step (Characterisation)	10
7.3 Distinguishing Features Claimed	12
7.3.1 Assessment of the disclosure of Reference R1 for features enabling	_
satisfaction of aforementioned requirements (C) and (D) in section	
herein	13
7.3.2 Assessment of Cited Documents D1, D2, D3, and D4 for features	_
satisfaction of aforementioned requirements (C) and (D) in section	
herein	14
Appendix 1	20
Radiation View Factors	20
Appendix 2	23
Extracts from the Disclosure of Reference R1 and the Priority Document	23
Appendix 3	26
Comparison of Heat Rejection Performance of Thermal Radiator Surface	
Blocker Component of Various Materials	26
Appendix 4	28
MLI, and Effective Emittance	28
Appendix 5	29 29
Analysis of a Sentence in Cited Document D4	33
Appendix 6  Priof Discussion of Absorptivity, Emissivity and Reflectivity of Sun Blocker	
Brief Discussion of Absorptivity, Emissivity and Reflectivity of Sun Blocker Surfaces	33
Appendix 7	35
Filled Out Information Disclosure Statement (IDS)	35
Amendments	38
- Exchange Page 31 in Response to Detailed Action In Reference R3;	. 38
- Exchange Page 59/1;	38
- Exchange Page 65;	38
- New Page 60/0/1.	38
Translation of EP Application No. 98401320.1	44
Translation of EP Application No. 87402281.7	47

Dear Mr. Collins,

#### Introduction

ノ

Thank you for the Office Action, which we have designated 'Reference R3' herein.

Herewith we submit the enclosed Exchange Pages 31, 59, and 65, plus New Page 60/0/1, which contain amendments to the disclosure of Reference R1, our US Patent application.

Also, we submit the remainder of the instant letter as an initial response to Reference R3 with a view to expediting a successful result from the current examination by the USPTO.

Accordingly, please contact me at the telephone number shown at the head of this letter with any questions or comments.

## Initial Response to Reference R3

In the following initial response to Reference R3 we follow the numbering of Reference R3.

# 1. Re Reference R3, paragraph 1 - "DETAILED ACTION"

Herewith, we submit Exchange Page 31, to be exchanged for Page 31 as filed. Exchange Page 31 includes amendments to the specification in the disclosure of Reference R1. The section "Brief Description of Drawings" in the specification in the disclosure of Reference R1 has been amended so that the numbers are stated individually.

# Specifically:

- a. The description [21 to 24] has been deleted and –21,22,23, 24,— has been inserted.
- b. The description [27 to 30] has been deleted and –27,28,29, and 30— has been inserted.

Also, we submit herewith the following additional amendments to the disclosure of Reference R1:

- c. Please exchange Exchange Pages 59/1 and 65, enclosed herewith in the 'Amendments' addendum, for pages 59/1 and 65 as filed for Reference R1. Those amendments have the effects of deleting "14." from in front of claim number 17, and of updating references to Figures contained in the abstract, respectively.
- d. Also, please add to the claims as filed New-Page 60/0/1, enclosed herewith in the 'Amendments' section.
- 2. Re Reference R3, paragraph 2 "Claim Rejections 35 USC § 112" We note the quotation of the second paragraph of 35 USC § 112.